

1/103

Figure 1

AAGGAGCACC ACGAAAACGC CCCAACTGGT GGGGCCGTAGG CCGTGAGGGG TTCTTGTCTG TAGTGGGCCGA
GAGCCGGGTG CATGACAACA AAGTTGGCCA CCAACACACT GTTGGGTCCT GAGGCAACAC TCGGACTTGT
TCCAGGTGTT GTCCCACCGC CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TGCAGCATC
AATGGATACG CTGCCGGCTA GCGGTGGCGT GTTCTTTGTG CAATATTCCT TGGTTTTTGT TGTGT

(SEQ ID NO 76)

2/103

Figure 2

AAGGAGCACC ACGAAAAGCA CCCCAACTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGNT GCGCAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TGGTCTTCGT GGCCGGCGGT CATCGAAATG TGTAATTTC TCCTTAACTC TTGTGTGT

(SEQ ID NO 77)

3/103

Figure 3

```
AAGGAGCACC ACGAAAAGCA CCCCAACTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCGTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TGGTCTTCGT GCGCGGCGGTT CATCGAAATG TGTAATTCT TTTTAACTC TTGTGTGT
```

(SEQ ID NO 78)

4/103

Figure 4

```
AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCGTCT GTAGTGGACG
GGGGCCGGNT GCACAAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGT TGTGTAATTG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTGT GGCTGATGCG CTCGTCGAAA TGTGTAATTG CTTCTTTGGT GTNTGTGTGT
```

(SEQ ID NO 79)

5/103

Figure 5

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTGG CGAGCATCTA
GATGAGCGCG TAGTCCCTTG TGGCTGATGC GTTCATCAAA ATGTGTAATT TCTTTTGTGG TTTNTGTGTG

T

(SEQ ID NO 80)

6/103

Figure 6

AAGGAGCAC	ACGAAAAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGTGAGGG	GTTCCTGCT	GTAGTGGACG
GGGGCCGGT	GCACAACAGC	AAATGATTGC	CAGACACACT	ATTGGGCCCT	GAGACAACAC	TCCGTCGATC
CGTGTGGAGT	CCCTCCATCT	TGGTGGTGGG	GTGTGGTGTT	TGAGTATTGG	ATAGTGGTTG	CGAGCATCTA
GATGAGCGCA	TAGCCCTTGC	GGCTGATGCC	TTCCGNCGAAA	TGTGTAATT	CTTCTCTGGT	TTCTGTGTGT

(SEQ ID NO 81)

7/103

Figure 7

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GNAGCCGGGT GCACAAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCCTTCG TGGCTGATGC GTTCATCGAA ATGTGTAATT TCTTCTTTGG TTTTGGGTGT

GT

(SEQ ID NO 82)

8/103

Figure 8

```
AAGGAGCACC ACGAAAAGCA CTCCAAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AAATGATCGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TTGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTTG GGGCTGATGT GTTTCATCAA AATGTGAAT TTCCTTTTNG GTTTTNGTGT
```

GT

(SEQ ID NO 83)

9/103

Figure 9

AAGGAGCACCC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCTTCG TGGCTGATGC GTTCATTGAA ATGTGTAATT TCTTCTCTGG TTTTGTGTG

T

(SEQ ID NO 84)

10/103

Figure 10

AAAGGAGCACC	ACGAAAAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGTGAGGG	GTCCCGTCT	GTAGTGGACG
GGGGCCGGGT	GCACAACAGC	AAATGATTGC	CAGACACACT	ATTGGGCCCT	GAGACAACAC	TCCGTCGATC
CGTGTGGAGT	CCCTCCATCT	TGGTGGTGGG	GTGTGGTGT	TGAGTATTGG	ATAGTGGTTG	CGAGCATCTA
GATGAGCGCA	TAGTCCCTTGT	GGCTGATGCG	CTCGTCGAAA	TGTGTAATT	CTTCTTTGGT	TTTTTGTGTGT

(SEQ ID NO 85)

11/103

Figure 11

AAGGAGCACG ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AAATGATGTC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTTGGTGT TTGAGTATTG GATAGTGGTT GCGAGCATCT
AGATGAGCGC GTAGTCCTTG TGGCTGATGC GTTCGTCGAA ATGTGTAATT TCCTCTTGG GTTTTGTGT

GT

(SEQ ID NO 86)

12/103

Figure 12

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GNAGCCGGNT GCGCAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACACAC TCGNCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTNGTGT TGAATATTG ATAGTGGTGG CGAGCATCTA
GATGGGCGCG TAGTCCTTTG TGAATGATGC GTTCATCAAA ATGTGTAATT TCTTTTGTGN NTTNGTGTG

T

(SEQ ID NO 87)

13/103

Figure 13

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTTG TGGCTGACGC GTTCATCGAA ATGTGTAATT TCCTCTTTGG TTTTGTGTG

T

(SEQ ID NO 88)

14/103

Figure 14

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGANGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTAG GGCTGATGCG TTCGTGCGNAA TGTGTAATTT CTTCTTTGGT TTTTGTGTGT

(SEQ ID NO 89)

15/103

Figure 15

AAGGAGCAC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATAATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCCTTCG TGGCTGACGT GTTCATCGAA ATGTGTAATT TCTTNTNTTA ACTCTTGTGT

GT

(SEQ ID NO 90)

16/103

Figure 16

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCAGTC
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCTTGT GACTGACGTG TTCATCGAAA TGTGTAATT CTTTCTAAC TCTTGTGTGT

(SEQ ID NO 91)

17/103

Figure 17

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATAT CTTCTCTGGT TTTCCGGTGTG

T

(SEQ ID NO 92)

18/103

Figure 18

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGNT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATT CTTTTNNAC TCTTGTGTGT

(SEQ ID NO 93)

19/103

Figure 12

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATTT CTTCTTTGGT TTTNGTGTGT

(SEQ ID NO 94)

20/103

Figure 20

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATAATTG ATAGTGGTGG CGAGCATCTA
GATGAACGCG TAGTCCTTCG NGGNCNGCGT GTTCATCGAA ATGTGTAATT TCTNTTNTAA CTCTNGTGTG

T

(SEQ ID NO 95)

21/103

Figure 21

AAGGAGCACG ACGAAAAGCA TCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCCTTCG GGGCCGGCGT GTTCATCGAA ATGTGTAATT TCCTTTTAA CTCTTGTGTG

T

(SEQ ID NO 96)

22/103

Figure 22

AAGGAGCACC ACGAAAAGCA CTTTCANTTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GCGCGGCGTG TTCATCGAAA TGTGTAATTT CTTCTTTAAC TCTTGTGTGT

(SEQ ID NO 97)

23/103

Figure 23

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGN AAATGATGTC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCNGCGTG TTCATCGAAA TGTGTAATT CTTTTTAAAC TCTTGTGTGT

(SEQ ID NO 98)

24/103

Figure 24

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATAATGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATTT CTTTTTTAAC TCTTGTGTGT

(SEQ ID NO 99)

25/103

Figure 25

AAGGAGCACC ACGAAAAGCA CCCCAACCTGG TGGGGTGCGA GCCGTGAGGG GTCCTCGCCT GTAGTGGGCG
GGGGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGGCAACAC TCGGCTCGTT
CTGAGTGGTG TCCCTCCATC TTGGTGGTGG GGTGGTGGTGT TTGAGTATTG GATAGTGGTT GCGAGCATCT
AAACGGATGC GTGGCCGGCA ACGGTGGCGT GTTCGTTGAA ATGTGTAATT TCTTTTGGG TTTTGTGTG

T

(SEQ ID NO 100)

26/103

Figure 26

AAGGAGCACC ACGAAAAGCA TCCCAACAAG TGGGGTGCAA NCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACGACAAC AAGCAAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACT CCGGCTCTGT
TCGAGAGTTG TCCCACCATC TTGGTGGTGG GGTGTGGTGT TTGAGAAATTG GATAGTGGTT GCGAGCATCA
AATGGATGCG TTGCCCTACG GGTAGCGTGT TCTTTTGTC AATTATTTC TTGGGTTTTT GTGT

(SEQ ID NO 101)

27/103

Figure 27

AAGGAGCACC ATTTCCCGAGT CGATGAACATA GGGAACATAA AGTAGGCATC TGTAGTGGAT ATCTACTTGG
TGAATATGTT TTGTAAATCC TGTCCACCCC GTGGATGGGT AGTCGGCAAA ACGTCGGACT GTCATAAGAA
TTGAAACGCT GGCACACTGT TGGGTCCTGA GGCAACACGT TGTGTTGTCA CCCTGCTTGG TGGTGGGGTG
TGGACTTTGA CTTCTGAATA GTGGTTGCGA GCATCTAAAC ATAGCCTCGC TCGTTTTTCGA GTGGGGGCTGG
TTTTTGCAATT TTA

(SEQ ID NO 102)

28/103

Figure 28

AAGGAGCACC ATTTCCCAGT CCGATGAACCT AGGGAACATA AAGTAGGCAT CTGTAGTGGG TATCTACTTG
GTGAATATGT TTTGTAAATC CTGTCCACCC CCGTGGATGG GTAGTCGGCA AAACGTCGGA CTGTCATAAG
AATTGAAACG CTGGCACACT GTTGGGTCCT GAGGCAACAC GTTGTGTTGT CACCCTGCTT GGTGGTGGGG
TGTGGACTTT GACTTCTGAA TAGTGGTTGC GAGCATCTAA ACATAGCCTC GCTCGTTTTC GAGTGAGGCT
GGTTTTTGCA ATTTTA

(SEQ ID NO 103)

29/103

Figure 29

AAGGAGCACC ACGAAGAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTCATCGTCT GTAGTGGACG
AAGACCGGGT GCACGACAAC AAGCTAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACCC CTCGGGTGCT
GTCCCCCCCAT CTGGTGGTG GGGTGTGGTG TTTGAGAAAT GGATAGTGGT TGCAGCATC AAAATGTATG
CGTTGTCTGTT CTCGGCAACG TGTTCTTTT GTCAATTTA TTCTTTGGTT TTTGTAGTGT TTGT

(SEQ ID NO 104)

30/103

Figure 30

AAGGAGCACC	ACGAAGAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGNGAGGG	GTCATCGTCT	GTAGTGGACG
AAGACTGGGT	GCACGACAAC	AAAGCAAGCC	AGACACACTA	TTGGGTCCTG	AGGCAACACC	CTCGGGTGCT
GCCCCGCCAT	CTTGGTGGTG	GGGTGTGGTG	TTTGAGAACT	GGATAGTGGT	TGCGAGCATC	AAAAATGTAT
GCGTTGTCGT	TCGCGACAAC	GTGTTCTTTT	TGTGCAATTT	TAATTCTTTT	GGTTTGGTA	GTGTTTGT

(SEQ ID NO 105)

31/103

Figure 31

AAGGAGCACC ACGAGAAGCA CTCCAATTGG TGGGGTGCAA GCCGTGAGGG GTCATCGTCT GTAGTGGACG
AAGACCGGGT GCACGACAAC AAGCAAAAGCC AGACACACTA TTGGGTCCTG AGCAACACCC CTCGGGTGCT
GTCCCCCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TGCAGGCATC AAAATGTATG
CGTTGTCGTT CGCGGCAACG TGTTCCTTTT GTGCAATTTT TATTCCTTTG TTTTGTAGT GTTTGT

(SEQ ID NO 106)

32/103

Figure 32

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCAA GCCGTGAGGG GTTCCCGCCT GTAGTGGGCG
GGCCCGGGTG CGCAACAGCA AATGATTGCC AGACACACTA TTGGGCCCCTG AGGCAACACT CGGATCGATT
GAGTGCTTGT CCCCCCATCT TGGTGGTCGG GTGTGGTGTT TGAGAACTGG ATAGTGGTTG CGAGCATCTA
AATGAACGCA CTGCCGATGG TGGTGTGTC GTTTGTGTA ATTTATTCT TTGGTTTTTG TGTTTGT

(SEQ ID NO 107)

33/103

Figure 33

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTNAGGG GTTCTCGTCT GTAGTGGATG
GCAGCCCGGT GCACANCAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACACAC TCGGTCAGTC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGNGTT TGAGTATTGG ATAGTGGTG CGANCACTA
GATGAACGG TAGTCCTCNG TGGCTGACGT GTTCATCAAA ATGTGTAATT TCTTTTANGG GTTTNGGGTGT

CT

(SEQ ID NO 108)

34/103

Figure 34

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGNGAGGG GTTCTCGCCT GTAGTGGNCG
AGGGCCGGAT GCACAACAAC ACATGATTGC CAGACACACT ATTGGGCCCT GANACAACAC TCGGCCAGTC
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGGATATNGG ATAGTNGTGT NGANCATCTA
AACGGCTGCG TNGNCNNGAA CGGTGGCGTG TTCGNTAAAA TGTGTAATTT CTTTNNNGGT TTGGGTGTNT

(SEQ ID NO 109)

35/103

Figure 35

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGCCT GTAGTGGGCG
ANGGCCGGGT GCACAACAAC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGCCAGTC
CGTGTGGTGT CCNCCATCT TGGTGGTGGG GTGTGGTGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
AANGNTGCG TTGCCGNNAN CNGTGGCGTN TTCGNTAAA TGTGTAANTT CTTTNNGGT TTGTGTGTGT

(SEQ ID NO 110)

36/103

Figure 36

ATCGAAGATC CCGGCTTCTT CATAAGCTCC CACACGAAAT GCCTGATTCA CTGGTTAGAC GATTGGGTCT
GTAGCTCAGT TGGTTAGAGC GCACCCCTGA TAAGGGTGAG GTCGGCAGTT CGAATCTGCC CAGACCCACC
AATTGTTGGT GTGCTGCGTG ATCCGATACG GGGCCATAGC TCAGCTGGGA GAGCGCCTGC TTTGCACGCA
GGAGGTCAGG AGTTCGATCC TCCTTGGCTC CACCATCTAA AACAAATCGTC GAAAGCTCAG AAATGAATGT
TCGTGGATGA ACATTGATTT CTGCTCTTTG CACCAGAACT GTTCTTTTAAA AATTCCGGTA TGTGATAGAA
GTAAGACTGA ATGATCTCTT TCACTGGTGA TCATTCAAGT CAAGGTAAAA TTTGCGAGTT CAAGCGCGAA
TTTTTCGGCGA ATGTCGTCTT CACAGTATAA CCAGATTGCT TGGGGTTATA T

(SEQ ID NO 111)

Figure 37

ATCGAAGACA TCAGCTTCTT CATAAGTATC CACACGAATT GCTTGATTCA TAGTCGAACG AATGCTGTAA
CGCGACCCGT GTTATAGGTC TGTAGCTCAG TTGGTTAGAG CGCACCCCTG ATAAGGGTGA GGTGGCAGT
TCAAATCTGC CCAGACCTAC CAATTGCTTG GTCGAGAAGA ATACGGGGCC ATAGCTCAGC TGGGAGAGCG
CCTGCCCTGC ACGCAGGAGG TCAGCGGTTT GATCCCGCTT GGCTCCACCA CTCCTCTCGTG TTGCGGTGAG
TGTTAAAGAG TTCAGAAATG ATGCCGCTTC AGGTTTGTCC TGTTCAGTGC TGATTTCTGG TCTTTTGACC
GGTACGAAA TCGTTCCTTA AAAATTGGA TATGTGATAG AAGTGACTGA TTAATTGCTT TCACCTGGCAA
TTGATCTGGT CAAGGTAAA TTTGTAGTTC TCAAGACGCA AATTTTCGGC GAATGTCGTC TTCACGATTG
AGACAGTAAC CAGATTGCTT GGGGTTATAT

37/103

(SEQ ID NO 112)

38/103

Figure 38

```
ATCGAAGACA CCGGCTTCGT CATAAGCTCC CACACGAATTI GCITGATTCACA CTTGCCGAAAG GCGATTTGGGT  
TTAGACCCGA GAGTAACGAT TGGGTCGTGA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGGTGAGGGTC  
GGCAGTTCGA ATCTGCCCAG ACCCACC AAT CGAAGGGCC ATAGCTCAGC TGGGAGAGCG CCTGCTTTTGC  
ACGCAGGAGG TCAGCGGTTT CAGTCCGCTT GGCTCCACCA TTAACCTCTAG TCGCCGAAAG CTCAGAAAATG  
AGTGTTTACC AGGATGAGGT TGATTGCCCTG GGTTGAACAT TGATTTCTGG ACTTTGCGCC AGAAGCTGTTT  
TTTAAAAAAT TGGGTATGTG ATAGAAAGTAG ACCGATGTGT TGCTTTTCACT GGCAGCATGT CGCGTCAAGG  
TAAAAATTGC GTGTTCTCTA TGCAAAATTT CGGCGAATGT CGTCTTTCACG TTATAGACAG TAACCAGAT  
GCTTGGGGTT ATAT
```

(SEQ ID NO 113)

39/103

Figure 39

ATCGAAGACT TCAGCTTCTT CATAAGTTCC CACACGAATT GCTTGATTCA CTTGCCGAAAA GCGATTGGGT
TGAGACCCGA GAGTGACGAT TGGGTCTGTA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGGTGAGGTC
GGCAGTTCGA ATCTGCCCCAG ACCCACC AAT TGTCGGGATG GCCAGTGTCA AATGGGGCCA TAGCTCAGCT
GGGAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCCG ATCCTCCTTG GCTCCACCAT CAACTCACGA
TCGCTGAAAG CTCAGAAATG AACATTGGTA GTCAATGTT GATTCTGGT CTTTGCGCCA GAACTGTTCT
TTAAAAATT GGGTATGTGA TAGAAGTGAC TAACAGCGTG TTTCACTGCA CGTTGTTAAT CAAGGCAAAA
TTTGCGAGTT CAAGCGCGAA TTTTCGGCGA ATGTCGTCTT CACGTTACGA ATCTATAACC AGATTGCTTG
GGTTATAT

(SEQ ID NO 114)

40/103

Figure 40

ATCGACGACA	TCAGCTGTCT	CATAAGCTCC	CACACGAATT	GCTTGATTCA	TTGAAGAAGA	CGATTAGGTT
AGCAACCTTC	GATTGGGTCT	GTAGCTCAGT	TGGTTAGAGC	GCACCCCTGA	TAAAGGTGAG	GTCGGCAGTT
CGAATCTGCC	CAGACCCACC	AATTGCTGG	GGCCATAGCT	CAGCTGGGAG	AGCGCCTGCC	TTGCACGCAG
GAGGTCAGCG	GTTCGATCCC	GCTTGGCTCC	ACCACCCCGC	TTGCCAGTTT	GTCAAAGCTT	AGAAATGAAT
ATTCCGCTCG	AATATTGATT	TCTGAACTTT	ATCAGAATCG	TTCCTTTAAA	ATTGCGGTAT	GTGATAGAAA
GATAGACTGG	ACAGCACTTT	CACCTGGTGTG	TGTTTCAGGCT	AAGGTAAAAT	TTGTGAGTAA	TTACAAGTTT
TCGGCGAATG	TTGTCCTTCAC	AGTATAACCA	GATTGCTTGG	GGTTTAAAT		

(SEQ ID NO 115)

41/103

Figure 41

TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCCTCTGTT TGTTCAGTTT TGAGAGGTTA ATTCTTCTCT
ATACTGTTTG TTCTTTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AAATAGGTAA CTATTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TGATTTGGAAG TATCATCGCT GATACGAAAA
ATCAGAAAAA CAACCTTTAC TTCATCGAAG TAAATT

(SEQ ID NO 116)

42/103

Figure 42

CTAAGGAAA GGAACCTGT GAGTTTTCGT TCTTCTCTAT TTGTTTCAGTT TTGAGAGGTT AGTACTTCTC
AGTATGTTTG TTCCTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AGATAAATTA TTATTTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA
ATCAGAAAA CAACCTTTAC TTCGTAGAAG TAAATT

(SEQ ID NO 117)

43/103

Figure 43

```
TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTCTCTCTGT TGAGAGGTTA TTACTTCTCT
GTATGTTTGT TCTTTGAAAA CTAGATAAGA AAGTTAGTAA AGTAGTGTA CTATTTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAAGTGA ATCTTTCATC TAATTCGACG TATCATCGCT
ATTAGAAAAA CAACCTTTAC TTCGACGAAG TAAATT GATACAGACA
```

(SEQ ID NO 118)

44/103

Figure 44

GGCCTATAGC TCAGCTGGTT AGAGCGCACC CCTGATAAGC GTGAGGTCGA TGGTTCGAGT CCATTTAGGC
CCACTTTTTC TTTCTGACAG AAGAAACACT GTATAACCTA TTTAAGGGGC CTAGCTCAG CTGGGAGAGC
GCCGTGCTTG CACGCAGGAG GTCAGCGGTT CGATCCCGCT AGGCTCCACC AAAATTGTTC TTGAAAAACT
AGATAAGAAA GTTAGTAAAG TTAGCATAAA TAGGTAACCTA TTTATGACAC AAGTAACCGA GAATCATCTG
AAAGTGAATC TTTTCATCTGA TTGGAAGTAT CATCGCTGAT ACGAAAAATC AGAAAAACAA CCTTTACTTC
ATCGAAGTAA ATT

(SEQ ID NO 119)

45/103

Figure 45

```
TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCTCTATT TGATCAGTTT TGAGAGGTTA CTCTCTTTTA
TGTCAGATAA AGTATGCAAG GCACATATGCT TGAAGCATCG CGCCACTACA TTTTGTACGG GCCTATAGCT
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTCGAGTC CATTTAGGCC CACTTTTCT
TTCTTGACATA AGAAATACAA ATAATCATAC CCTTTTACGG GGCCTTAGCT CAGCTGGGAG AGCGCCTGCT
TTGACACGCG GAGGTCAGCG GTTCGATCCC GCTAGGCTCC ACCAAAATTG TTCTTTGAAA ACTAGATAAG
AAAGTTAGTA AAGTTAGCAT AGATAATTTA TTATTTATGA CACAAGTAAC CGAGAAATCAT CTGAAAAGTGA
ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA ATCAGAAAAA CAACCTTTAC TTTCGTAGAAAG
TAAATT
```

(SEQ ID NO 120)

Figure 46

TAAGGAAAAG GAAACCTGTN AGTTTNCGTN CTTCTCTGTT TGTNCAGTTT TNAGAGGTTA CTCTCTTTNA
TGTCAGATAA AGTACGCACG GCACGTTGCC TTGGGCAAG AGCCACTACA TTATTGACGG GCCATA'AGCT
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTCGAGTC CATTAGGCC CACTTTTCT
TTCTGACAGA AGAAATCATT TGCACATCCT ATTAATAAGG GNCCTTAGCT CAGCTGGGAG AGCGCCTGCT
TTGCACGCAG GAGGTCAGCG GTTCGATCCC GCTAGGCTCC ACCCAAATTT GTTCTTTGAA AACTAGATAA
GAAAGTTAGT AAAGTTAGCA TAAGTAGTAT AACTATTTAT GACACAAGTA ACCGAGAATC ATCTGAAAGT
GAATCTTTCA TCTAATTCGA CGTATCATCG CTGATACAGA CAATTNGAAA AACAACTTTT ACTTCGACGA
AGTAAATTT

(SEQ ID NO 121)

47/103

Figure 47

TAAGGATAAG GATAACTGTC TTAGGACGGT TTGACTAGGT TGGGCAAGCG TTTTTTAAAT CTTGTATTCCT
ATTCCCTTTG CATGTTAAG CGTTGTTCC AAAACATTAA GTTTACGATC AAGTATGTTA TGTAATAATAAT
ATGGTAACAA GTAAATTCAC ATATAATAAT AGACGTTTAA GAATATATGT CTTTAGGTGA TGTTAACTTG
CATGGATCAA TAAATTACA

(SEQ ID NO 122)

48/103

Figure 48

TAAGGATAAG GAAGAAGCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA
TTCATATTCA TTTGTGTTGT TAAGAGTAGC GTGGTGAGGA CGAGACATAT AGTTGTGAT CAAGTATGTT
ATTGTAAGA AATAATCATG GTAACAAGTA TATTCACGC ATAATAAG ACGTTAAGA GTATTTGTC
TTTAGGTGAA GTGCTTGCAAT GGATCTATAG AAATTACA

(SEQ ID NO 123)

49/103

Figure 49

CAAATGGAGT TTTTATTTT TATTATCTT AACACCCAT TAAATTTTTC GGTGTTAAA CCCAAATCAA
TGTTTGGTCT CACAACTAAC ACATTTGGTC AGTTGTATC CAGTTCTGAA AGAATGTTT TGAACAGTTC
TTTCAAAAC T GAAACGACA ATCTTCTAG TTCCAAAAT AATACCAA GGATCAATAC AATAAGTTAC
TAAGGGCTTA TGGT

(SEQ ID NO 124)

50/103

Figure 50

CTAATGAAGT TTTTACTTTT TTCCTTTCAT CTTTAATAAA GATAAATACT AAACAAAACA TCAAAATCCA
TTTATTATC GGTGGTAAAT TAAACCCAAA TCCCTGTTTG GTCTCACAAC TAACATAATT GGTGAGATTG
TATCCAGTTC TGAAAGAACA TTTCCGCTTC TTTCAAAACT GAAAACGACA ATCTTCTTAG TTCCAAATAA
ATACCAAAGG ATCAATACAA TAAGTTACTA AGGCCTTAG GT

(SEQ ID NO 125)

51/103

Figure 51

AACGAAAGAT TGACGATTGG TAAGAATCCA CAACAAGTTG TTCTTCATAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTCTAGA CCCACCATGA
CTTTGACTGG TTGAAGTTAT AGATAAAAGA TACATGATTG ATGATGTAAG CTGGGGACTT AGCTTAGTTG
GTAGAGCGCC TGCTTTGCAC GCAGGAGGTC AGGAGTTCGA CTCCTCCTAGT CTCCACCAGA ACTTAAGATA
AGTTCGGATT ACAGAAATTA GTAAATAAAG ATTGAGATCT TGGTTTATTA ACTTCTGTGA TTTTCATTATC
ACGGTAATTA GTGTGATCTG ACGAAGACAC ATTAACATCAT TAACAGATTG GCAAAATTGA GTCTGAAATA
AATTGTTTAC TCAAGAGTTT AGGTTAAGCA ATTAATCTAG ATGAATTGAG AACTAGCAAA TTAACCTGAAT
CAAGCGTTTT GGTATGTGAA TTTAGATTGA AGCTGTACAG TGCTTTAAGTG CACAGTGCCTC TAAACCTGAAA
TGTTGAAGTT ACTAACTTGT AGGTAACATC GACTGTTTGG GGTTCGTAAT

(SEQ ID NO 126)

52/103

Figure 52

AACGAAAGAT TGACGATTGG TAAGAATCC³A CGACAAGTTG TTCTTCATAG ATGTATCTGA GGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTGAGA CCCACCATGA
CTTTGACTGG TTGAAGTTAT AGAAAAGAAG ATACATAACT GATGATGTAA GCTGGGGACT TAGCTTAGTT
GGTAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCG ACTCTCCTAG TCTCCACCA

(SEQ ID NO 127)

53/103

Figure 53

```
AACGAAAGAT TGATGGCCGG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA EGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTCAAG TCTTGTGAGA CCCACCAAAT
CTGAAAGATA TGTGTTTCAT TATGATTAAA GCTGGGGACT TAGCTTAGTT GGTAAGAGCGC CTGCTTTTGCA
CGCAGGAGGT CAGGAGTTCC ACTCTCCTAG TCTCCACCA
```

(SEQ ID NO 128)

54/103

Figure 54

AACGAAAGAT TGACGATTGG TAAGAATCCA CAACAAGTTG TTCTTTCATGA CGATGTATCT GAGGGTCTGT
AGCTCAGTTG GTTAGAGCAC ACGCTTGATA AGCGTGGGT CACAAGTTCA AGTCTTGTCA GACCCACCAA
ATCTGACTAA CAAGCATTAT TAAATGCTGA ATACAGAAAA ACAGAGACAT TGACTTATTG ATAAGCTGGG
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCTCCA
CCA

(SEQ ID NO 129)

55/103

Figure 55

AACGAAAGAT TGGTGACCGG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTGAGA CCCACCACTA
CTGACGAAAGT GATGAATAAT CACAAGCTGC TAGATGAAAA GATAATGTCGT TCATTATGAT TAAAGCTGGG
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCTCCA

CCA

(SEQ ID NO 130)

56/103

Figure 56

TAAGGAAGAT CGAGAAATTGG AAAGAGGTCC GATTATATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCCTCTTCT TCATTGTTGA
TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGCG GCCCATCAGG GCCGACGGCC
GGTCGGCCTT GCNAAGCTTC GCTTCGGGT GGATCTGTGG ATCGCGTAGT AGCGTTTGGG TCGGTATCTG
GGCTTGAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGTCGG AGGTTCAAGT CCTCCCAGGC
CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTGCAAGCA GGGGTCGTC
GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGTGGA GACGGATATTT GGCAN'TCAAC AAAAGAAAGA
AACAAAGTTG CGGACTNTTA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAAGA TGTAAATCGGA
TCAACTGAAG AGTTGATGTC GCAAGAAAGCT TGCTCAAGCC TTGCATAATG ATTGATGTGT TTAACCGCCA
TCACCGATTG TATCTCGAGA AGCTGGTCTT TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG
CAACATTCCG CGTCGCATAA TGCGGCTTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA
AGTGTCTTAA GGGCATTTGGT GGATGCCCTG GCATGCAC

(SEQ ID NO 131)

57/103

Figure 57

```

TAAGGAGGAT CGAGAAATTGG AAAGAGGCCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
GATCGCAGNC CAGTCAGCCT GACGATCGCT TGCAGGCCGTG CCGCCTTCGT TTCTCTTTCT TCAATTGTGA
TTGCTCACCG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCCGG GNCCATCAGG GCCGACGGCC
GGTCGGCCTT GCGAAGCTTC GCTTCGGGT GGATCTGTGG ATCGCGTAGT AGCGTTTGG TCGGTATCTG
GGCTGTAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGTCCG AGGTTCAAGT CCTCCCAGGC
CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTTGCAAGCA GGGGTCTGTC
GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGTGA GACGGATATT GGCAATCAAC AAAAGAAAAGA
AACAAAGTTG CGGACTNNTA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAAGA TGTAAATCGGA
TCAACTGAAG AGTTGATGTC GCAAGAAGCT TGCTCAAGCC TTGCATAATG ATTGATGTGT TTAACCGCCA
TCACCGATTG TATCTCGAGA AGCTGGTCTT TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG
CAACATTCCG CGTCGCATAA TCGGCTTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA
AGTGTCTTAA GGGCATTTGGT GGATGCCCTTG GCATGCAC

```

(SEQ ID NO 132)

58/103

Figure 58

CCTTAAAGAA	CTGTTCTTTG	CAGTGCTCAC	ACAGATTGTC	TGATGAAAAG	TAAATAGCAA	GGCGTCTTGC
GAAGCAGACT	GATACGTCCC	CTTCGTCTAG	AGGCCCAGGA	CACCGCCCTT	TCACGGCGGT	AACAGGGGTT
CGAATCCCT	AGGGACGCC	ACTTGCGCGG	TAATGTGTGA	AAGCGTTGCC	ATCAGTATCT	CAAAACTGAC
TTACCGAGTCA	CGTTTGAGAT	ATTTGCTCTT	TAAAATCTG	GATCAAGCTG	AAAATTGAAA	CACAGAACAA
CGAAAGTTGT	TCGTGAGTCT	CTCAAATTTT	CGCAACACGA	TGATGAATCG	TAAGAAACAT	CTTCGGGTTG
TGA						

(SEQ ID NO 133)

59/103

Figure 59

```
CCTTAAAGAA CTGTTCTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTCAAGT CCACTCAGGC
CTACCAAAAT TTCCCTGAAT ACTGCCTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCACCG
CCTTGCTCTCA GGAATAATTA TCGGTAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGGCTGCGG TTCGATCCCG CATAGCTCCA CCATACTGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAACGG TTCACTGCCA AGTTTGTCTC TTAAAAAATC TGGATCAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAATT TTCGCAACAC GATGATGAAT
CGTAAGAAAC ATCTTCGGGT TGTGA
```

(SEQ ID NO 134)

60/103

Figure 60

CCTTAAAGAA GCGTACTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAG TAAATAGCAA GGCGTCTTGC
GAAGCAGACT GATACGTCCC CTTCGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGTT
CGAATCCCCT AGGGACGCC ACTTGCGCGG TAATGTGTGA AAGCGTTGCC ATCAGTATCT CAAAAC'TGAC
TTACGAGTCA CGTTTGAGAT ATTTGCTCTT TAAAAATCTG GATCAAGCTG AAAATTTGAAA CACAGAACA
CGAAAGTTGT TCGTGAGTCT CTCAAATTTT CGCAACACGA TGATGAATCG TAAGAAACAT CTTCCGGGTTG
TGA

(SEQ ID NO 135)

61/103

Figure 61

CCTTAAAGAA CTGTTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG
CCTTGCTCA GGAAAAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGTCTGCGG TTCGATCCCG CATAGCTCCA CCATCTCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACCTGCGA AGTTTTCGTC TTTAAAAAATC TGGATCAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAATT TTCGCAACAC G

(SEQ ID NO 136)

62/103

Figure 62

CCTTAAAGAA GCGTACTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAG TGAATAGCAA GGCGTCTTGC
GATTGAGACT TCAGTGTTCC CTTCTGCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGGTT
CGAATCCCCCT AGGGGACGCC AGCGTTCAAA CTGATGAGGT CAAACCTCCA GGGACGCCAC TTGCTGGTTT
GTGAGTGAAA GTCACCTGCC TTAATATCTC AAAACTGACT TACGAGTCAC GTTTGAGATA TTTGCTCTTT
AAAAATCTGG ATCAAGCTGA AAATTGAAAC ACAGAACCAAC GAAAGTTGTT CGTGAGTCTC TCAAAATTTTC
GCAACACGAT GATGAATCGT AAGAAACATC TTCGGGTTGT GA

(SEQ ID NO 137)

63/103

Figure 63

CCTTAAAGAA ACGGTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG
CCTTGCTCTA GGAAAAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGGTCTGCGG TTCGATCCCG CATAGCTCCA CCATCTCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACTGCCA AGTTTTCGTC TTAAAAAATC TGGATCAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAAAT TTCCGCAACAC GATGATGAAAT
CGTAAGAAAC ATCTTCGGGT TGTGA

(SEQ ID NO 138)

64/103

Figure 64

CTAAGGATAT ATTGGGAACA TCTTCTTCGG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGTTTGTGAA
TGTTTATTTA ACATTCAAAT ATTTTTCGGT TAAAGTGATA TTGCTTTTGA AAATAAAGCA GTATGCGAGC
GCTTGACTAA AAAAAATGT ACATTGAAA CTAGATAAGT AAGTAAAAA TAGATTTTAC CAAGCAAAAC
CGAGTGAATA AAGAGTTTAA AATAAGCTTG AATTCATAAG AATAATCGC TAGTGTTTCA AAGAACACTC
ACAAGATTAA TAACGCGTTT AAATCTTTT ATAAAAGAAC GTAACGTTT GACTTATATAA
AATGGTGAA ACATA

(SEQ ID NO 139)

65/103

Figure 65

CTAAGGATAT ATTCGGAACA TCTTCTTCAG AAGATGCCGA ATAACGTGAC ATATTGTATT CAGTTTGTAA
TGTTTATTTA ACATTCAAAAT ATTTTTCGCT TAAAGTGATA TTGCTTATGC GAGCNCTTGA CAACTCTATTC
TTTPTTAAAG AAGCGCTTGT CAGACAAATGC ATTAAGAANA APTTAAAGCGG AGTPTTACPTT TGTAAAATGAG
CATTTGATTT TTTGAAAATA AAGCAGTATG CGAGCGCTTG ACIAAANAAGA AATPTGTACAT TGAANAACTAG
ATAAGTAAGT AAAATATAGA TTTTACCAG CAAACCGAG TGAATAAAGA GTTTTAAATA AGCTTGAATTT
CATAAGAAAAT AATCGCTAGT GTTCGAAAAGA ACACTCACAA GATTAATAAAC GCGTTTAAAT CTTTTTATAA
AAGAAAACGT TTAGCAGACA ATGAGTTAAA TTATTTTAAA GCAGAGTTTA CTTATGTAAA TGAGCATTTA
AAATAATGAA AACGAAGCCG TATGTGAGCA TTTGACTTAT AAAAATGGTG GAAACATA

(SEQ ID NO 140)

66/103

Figure 66

CTAAGGATAT	ATTCGGAACA	TCTTCTTCAG	AAGATGCGGA	ATAACGTGAC	ATATTGTATT	CAGTTTGGAA
TGTTTATTTA	ACATTCAAAT	ATTTTTTGGT	TAAAGTGATA	TTGCTTATGC	GAGCGCTTGA	CAATCTATTTC
TTTTTTAAAGA	AAGCGGTTGT	CAGACAATGC	ATTAAGAAAA	ATTAAGCGCG	AGTTTACTTT	TGTAATAATGAG
CATTTGATTT	TTTGAAAAATA	AAGCAGTATG	CGAGCGCTTG	ACTAAAAANGA	AATTGTACAT	TGAAAAACTAG
ATAAGTAAGT	AAATATAGA	TTTTTACCAAG	CAAAACCGAG	TGAATAAAGA	GTTTTTGAATA	AGCTTGAATT
CATAAGAAAT	AATCGCTAGT	GTTCGAAAGA	ACACTCACAA	GATTAATAAC	GCGTTTAAAT	CTTTTATATA
AAGAACGTAA	CTTCATGTTA	ACGTTTGACT	TATAAAAATG	GTGGAACACAT	A	

(SEQ ID NO 141)

67/103

Figure 67

CTAAGGATAT ATTGGGAACA TCTTCTTCAG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGNTTTGAA
TGTTTATTTA ACATTCAAAA AATGGGCCCTA TAGCTCAGCT GGTAGAGCG CACGCCCTGAT AAGCGTGAGG
TCGGTGGTTC GAGTCCACTT AGGCCACCCA TTATTGTAC ATTGAAAACCT AGATAAGTAA GTAAAAATATA
GATTTTACCA AGCAAAACCG AGTGAATAAA GAGTTTTAAA TAAGCTTGAA TTCATAAGAA ATAATCGCTA
GTGTTTCGAA GAACACTCAC AAGATTAAATA ACGCGTTTAA ATCTTTTAT AAAAGAACGT AACTTCATGT
TAACGTTTGA CTTATAAAAA TGGTGGAAAC ATA

(SEQ ID NO 142)

68/103

Figure 68

CTAAGGATAT ATTCCGGAACA TCTTCYTCAG AAGATGCGGA ATAAATGTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTTA ACATTCAAAT ATTTTTTGGT TAAAGTGATA TTGCTTATGC GAGCGCTTGA CTAAAAAGAA
ATTGTACATT GAAAACTAGA TAAAGTAAGTA AAANTATAGA TTTTACCAAG CAAAACCGAG TGAAT'AAAGA
GTTTAAATA AGCTTGAATT CATAAGAAAT AATCGCTAGT GTTCGAAAGA ACACTCACAA GATTAATAAC
GCGTTTAAAT CTTTTTATAA AAGAACGTAA CTTCATGTTA ACGTTTGACT TATAAAAAATG GTGGAAACAT

A

(SEQ ID NO 143)

69/103

Figure 62

CTAAGGATAT ATTGGGAACA TCTTCTACGA AGATGAGGGA ATAACGTGAC ATATGTATT CAGTTTGTGAA
TGTTTATTAA CATTCAATTG TACATTGAAA ACTAGATAAG TAAGTAAGAT TTTACCAAGC AAAACCGAGT
GAATAGAGTT TTAATAAAGC TTGAATTTCAT AAATAATCGC TAGTGTTTCGA AAGACNTCCA CAAGATTAAAT
AACTAGTTTT AGCTATTAT TTTGAATAAC AATCAAAAT ATGGTGGGAC ATA

(SEQ ID NO 144)

70/103

Figure 70

AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGGTCTTG TG GGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAG
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAAGA GTTTATGACT GAAAGGTCAA AAAATAA

(SEQ ID NO 145)

71/103

Figure 71

AAGGAAATGG AACACGTTTA TCGTCTTATT TAGTTTGTAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTNGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATCAGGATA CANTCCTACT
AACTTAATA CAAGTGAAGT TGAACACGCA ACTCACTTCC TAGGAAAATA GACAATCTTC GCTTGTGTGC
AAGGCACACA TGGTCAGATT CCTAATTTTC TACAGAAAGT TCGCTAAAGC GAGCGTTGCT TAGTATCCTA
TATAATAGTC CATNGAAAAT TGAATATCTA TATCAAAATTC CACGATCTAG AAATAGATTG TGGAAAACGTA
ACAAGAAATT AACCCGNAAA CGCTG

(SEQ ID NO 146)

72/103

Figure 72

AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGGTCAGAAA ATAA

(SEQ ID NO 147)

73/103

Figure 73

CTAAGGATAT ATTCGGAACA TCTTCTTACG AAGATGCAGG AATAACATTG ACATATTGTA TTCAGNTGTG
AATGCTCAT T GGAGNATTCA TNGCATNATT TGGTNCATTG ACANCTAGAT AAGNAAGTAA AATTATGAT
TTTACCAAGC AAAACCGAGT GAATTAGAGT TNTNNAACAA GCTTTGATTT CAAAAAGAAA TAATCGCTAG
TGTTTCGAAAG AACACTCACA GATTANTAAC ATCTTGGGTT TTCACCCGAC TTGTTCTGNT CGAAAAGTCAA
AAAA

(SEQ ID NO 148)

74/103

Figure 74

AAGGATAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTGACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAAA AAATAA

(SEQ ID NO 149)

Figure 75

AAGGATAAGG AACTGCCGCA TGGTCTTGTT TAGTCTTGAG AGGTCTTGTT GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCAACGCA GGAGGTCAGC GGTTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAAATAA

(SEQ ID NO 150)

Figure 76

AAGGAAAAGG AACTGCCGAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAG
GTAATGCACA TTGAAAATTG AATATCTATA TCAATAGTA ACAAGAAAAT AAACCGAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAAATAA

(SEQ ID NO 151)

77/103

Figure 77

AAGGATAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTC GGGCCTTAGC TCAGCTGGGA
GACCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGTCAGAAA ATAA

(SEQ ID NO 152)

78/103

Figure 78

AAGGATAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGACGCA GGAGGTCAGC GGTCGATCC CGTAGGCTC CATTGGTGAG AGATCACCAG
GTAATGCACA TTGAAAATG AATATCTATA TCAAATAGTA ACAAGAAAT AACCGAAAC GCTGTAGTAT
TAAAGAGTT TATGACTGAA AGGTCAAAA TAA

(SEQ ID NO 153)

SUBSTITUTE SHEET (RULE 26)

Figure 72

TAAGGAAGAT CGAGAAATGG AAAGAGGTCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
 GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTTCGT TTCTCTTTTCT TCATTTGTTGA
 TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGCG GCCCATCAGG GCCGAACGGC
 CGGTCGGCCT TGCNAAGCTT CGCTTCGGGG TGGATCTGTG GATCGCGTAG TAGCGTTTGC GTCGGTATCT
 GGGCTGTAG CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCG GAGGTCAAG TCCTCCCCAGG
 CCCACCAAGT TACTTGATGA GGGGCCGTAG CTCAGCTGGG AGAGCACCTG CTTTGCAAGC AGGGGGTCGT
 CGGTTTCGATC CCGTCCGGCT CCACCATCAT GTTGGTGTG AGACGGATAT TGGCAATCAA CAAAAGAAAG
 AAACAAGTT GCGGACTNNT ACGAAAGTCT GCCTGTTCTG TATGAAATCG TGAAGAGAAG ATGTAATCGG
 ATCAACTGAA GAGTTGATGT CGCAAGAAGC TTGCTCAAGC CTTGCATAAT GATTGATGT TTTAACCGCC
 ATCACCATT GTATCTCGAG AAGCTGGTCT TTCTGCTGAT ACTGTTGAAA CGAGCATTTG CAGTCGAATG
 GCAACATTCG GCGTCGCATA ATGCGGCTTT AAGAGCTGAG TTTTGATGGA TATTGGCAAT GAGAGTGATC
 AAGTGCTTA AGGCATTGG TGGATGCCCTT GGCATGCAC

79/103

(SEQ ID NO 154)

Figure 80

AAGGAGCACCC ACGAGAAACA CTCCAATTGG TGGGGTGTAAG GCCGTGAGGG GTTC'TCGTCT GTAGTGGACG
GAAGCCGGGT GCACAACAAC AAGCAAGCCA GACACACTAT TGGGTCCCTGA GGCAACATCT CTGTTGGTTT
CGGATGTTG TCCACCATC TTGGTGGTGG GGTGTGGTGT TTGAGAAATG GATAGTGGTT GCGAGCATCA
ATTGGATGCG CTGCCTTTGG GTGGCGTGTT CTGTGTGTGCA ATTTAATTCT TTGGT'TTTTG TGT'TTAT

(SEQ ID NO 157)

81/103

Figure 81

ANGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTTGCCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTCCTTT TGGTTCCTTT

GTTCGT

(SEQ ID NO 158)

Figure 82

AAGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGCCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTGTGAG CATGGAATAG TGGTTGCCGAG
CATCTAGACG GATGCCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTTTT TGGTTTTTGT
GTTTCGT

(SEQ ID NO 159)

83/103

Figure 83

```
AAGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGNNCGGGT NNACAACAAC NGCCAATCGC CGGACACACT ATTGGGNCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATGAATAG TGGTTGCCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTCC GCGTTCGTCA AAAATGTGTA ATTTTCTCNT TGGTTTTTGT
GTTTCGT
```

(SEQ ID NO 160)

84/103

Figure 84

```
AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGAGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAGC AGACATTCGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
TTGGTTCGACG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATGAATAG TGGTTGCCGAG
CATCTAGACG GATGCGTTGC CCTCGGGCCG CGTGTTCTGC AAAAATGTGT AATTTTCTT TTTGGTTT
```

(SEQ ID NO 161)

85/103

Figure 85

AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGAGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAAACAC AGGCAATCGC CAGACACACT AT'GGGCCCC' GAGACAAACAC TCGGCCCGCT
'TTGAGTCGAA GTGGTG'FCCC TCCATCTTGG TGGTGT'TTGA GCATTTGAATA GTGGT'TGCGA
GCATCTAGAC GGATGCGTTG CCTTCGGGCC GCGTGTTCGT CAAAAATGTG TAATTTTTC TTTTGGTTT

TGTGTTTCGT

(SEQ ID NO 162)

86/103

Figure 86

AGGAGCACC GNAACGCAT CCCGCGTGG GTGTGGGTTT GCGTGTGT GCGTCGNC CGAGGTGTG
GGCAGCAGG AGTAACCNCC GGAACACTGT TGGTTTGA GNNACACCCC GTGGTGGTGT TGTGCTCCCC
GTGGTGNCGG GGTGTGGTGT TTGAGTGTG GATAGTGGTT GCGAGCATCT GGCAAAGACT GTGGTAAGCG
GTTTTTGTG ANTGTTTCT GGTGTTGT

(SEQ ID NO 163)

87/103

Figure 87

```
AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGACG
AGGNCGGGT GCACAACAAC AGNCAATCGC CAGACACACT ATTGNCCTT GAGACAACAC TCGGCCGACT
TNGGTTGAAG TGGTGTCCT CCATCTTGGT GGTTGTTGAG GGTGTTGAG TATGGATAG TGGTTGCGAG
CATCTAANTG AACGCGTCGC CGNCAACGGT TACGTGTTTCG TTTTGTGTAA TTNTTCTAT TGGTTTGTGT
GTTTCGT
```

(SEQ ID NO 164)

88/103

Figure 88

```
AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CAGACACACT ATTGNCCTT GAGACACAC TCGGCCGACT
TTGGTCGAAG TGGTGTCCCC CCATCTTGGT GGTGGGGTGT GGTGTTTGAG TATTGGATAG TGGTTGCGAA
CATCTAAATG AACGCGTTGC CGGCAACGGT TACGTGTTCC TTTTAGTGTA ATTNTTCTA ATGGTTTTTG
TGTTTCGT
```

(SEQ ID NO 165)

SUBSTITUTE SHEET (RULE 26)

89/103

Figure 89

AAGGAGCACC	ACGAGACCCTG	GGCCGGGCCCC	GCAGATCGCG	GGATCAGCTG	AGCTTTCAGG	CGATTCGTTG
GATGGCCCTCG	CACCTGTAGT	GGGTGGGGGT	CTGGTGCACT	CAACAAACTT	GGCGTGGGAT	GCGGGAAGC
ATCTGCCGGA	AATCATCAGA	CACACTATTG	GGCTTTGAGA	CAACAGGCC	GCAGNCCCTGN	CCCCTTGGGG
GCAGNGGGTG	TGTTGTTGCC	TCACCTTTGGT	GGTGGGGGTG	GTGTTTGATT	TGTGGATAGT	GGTTGCCGAGC
ATCTAGCGCG	CAGAAATGTGT	GGTCTCACTC	CTTGTGGGTG	GGGCTGGTT	TTGTGTGCGA	TTGATGTGCA
ATTTCTTTTG	AAACTCATTT	TTTGGGTTTTT	GTGTTGT			

(SEQ ID NO 166)

90/103

Figure 20

AAGGAGCACC ACGAAAAACT CCCCAATTGG TGGGGTGTAA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT CCGCAACAGC AAGCGAAACG CCGGACACAC TATTGGGTCC TGAGGCAACA CTCGGGTTTG
TCCCCCTCAG GGATTCTG GGTGTTGTCC CACCATCTTG GTGGTGGGT GTGGTGTG AGAATTGGAT
AGTGGTTGCG AGCATCAAT GGATGCCGTTG CCCCTACGGG TAGCGTGTTC TTTTGTGCAA TTTTATTCNT
TGGTTTTTGT GTTTGT

(SEQ ID NO 167)

91/103

Figure 91

AAGGAGCACC ACGAGAAGCA CTCCAACTGG TGGGGTGCAA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGAGCCGGGT GCGCGACAAC GAACGAGCCA GACACACTAT TGGGTCCTGA GGCAACACTC GGGCTTGGCC
AGAGCTGTTG TCCCACCATC TTGGTGGTGG GGTGTGGTGT TTGAGAAATG GATAGTGGTT GCGAGCATCA
AATGGATGCG TTGCCCCCTAC GGGTGGCGTG TTCTTTTGTG CAATTTTAT TTTTGGTTT TGTGTTTGT

(SEQ ID NO 168)

92/103

Figure 22

```
AAGGAGCACC ACGAAAAACA CCCCAACTGG TGGGGTGTAA GCCGTGAGGG GCTCCCGTCT GTAGTAGACG
GGCGCCGGGT GCGCAACAGC AAGCGAGCCA GACACACTAT TGGGTCCCTGA GGCAACACTC GGGCTTGTCT
TGGA CTGTC CAAGAGTGTT GTCCCACCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAAAT GGATAGTGGT
TGCAGCATC ANCTGGATGC GTTGCCCCCA GGGTAGCGT GTTCTTTTGT GCAATTNTAT TCNNTGGTTT
TTGTGTAGT
```

(SEQ ID NO 169)

93/103

Figure 93

AAGGAGCACC ACGAAAACA CTCCGCATCC GGTGGGGTGT GAGCCGTGAG GGAGCCCCTG CCTGTAGTGG
GTGTGGGTTG GGTGCCCGAC AACAAATGGG AAAAATCGCT GGGCACACTA TTGGGCTTTG AGGCAACACC
TGGTTTGT TTGGTGGTGT CGCTCCATCT TGGTGGTGGG GTGTGGTGT TGAGTTGTGG ATAGTGGTTG
CGAGCATCTA AGCAAAAGCT GTTGTTTTGAC GGTTTTGTG GAGTGTGTG TGTGT

(SEQ ID NO 170)

94/103

Figure 94

AAGGAGCACC ACGAAAAACA CTCCAATTGG TGGGGTGTAAGCCGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGTG AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTATT CATTGAAAT GTGTAATTTT
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 171)

95/103

Figure 95

AAGGAGCACC ACGAAAAACA CTCCAATTGG TGGGGTGTA GCGGTGAGGG GTTCATCATCT GTAGTGGACG
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGTG AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTGT CATGAAAAT GTGTAATTTT
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 172)

96/103

Figure 96

AAGGAGCACC ACGAAAAACA CTCCAATTGG TGGGGTGTAAGCCGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGT'TGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGGT GTGGTGT'TG AGTATTGGAT
AGTGGTTGCC AGCATCTAAA TGGANACGTT GCCAGTAATG GTGGCCGTGTT CATGAAAAT GTGTAATTTT
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 173)

97/103

Figure 97

AAGGAGCACC	ATTTCCTCAGT	CGAATGAACT	GAGAACATAA	AGCGAGTATC	TGTAGTGGAT	ACATGCTTGG
TGAATATGTT	TTATAAATCC	TGTCCACCCC	GTGGATAGGT	AGTCGGCAAA	ACGTCGGACT	GTCATAAGAA
TTGAAACGCT	GGCACACTGT	TGGGTCCTGA	GGCAACACAT	TGTGTTGTCA	CCCTGCTTGG	TGGTGGGGTG
TGGTCCTTGA	CTTATGGATA	GTGGTTGCGA	GCATCTAAAC	ATAGCCTCGC	TCGTTTTCGA	GTGAGGCTGG
TTTTTGCAAT	TTTATTAGCT					

(SEQ ID NO 174)

98/103

Figure 98

CCTAATGATA TTGATTCCGG TGAAGTGCTC ACACAGATTG TCTGATGAAA AAGTAACGAG CAGAAATACC
TTTATAGGCT TGTAGCTCAG GTGGTTAGAG CGCACCCCTG ATAAGGGTGA GGTCCGGTGGT TCAAGTCCAC
TCAGGCCCTAC CACTTCTCGA AGTGGAAAAG GTACTGCACG TGACTGTATG GGGCTATAGC TCAGCTGGGA
GAGCGCCTGC CTTGCACGCA GGAGGTCAGC GGTTCGATCC CGCTTAGCTC CACCATAATAG TCCTGTATTT
CAATACTTCA GAGTGTA CTG GCAACAGTAT GCTGCGAAGT ATTTTGCCTT TTAACAATCT GGAACAAGCT
GAAAATTGAA ACATGACAGC TGAAACTTAT CCTCCGTAG AAGTATTTGGG GTAAAGGATTA ACCTGTCTATA
GAGTCTCTCA AATGTAGCAG CACGAAAGTG GAAACACCTT CGGGTTGTGA

(SEQ ID NO 195)

99/103

Figure 99

```
CCTAATGATA TTGATTCGCG TGAAGTGCTC ACACAGATTG TTTGATAGAA ACGTAATGAG CAAAAGCGCT
ACCTGTTGAT GTAAATGAGTC ACTGACTCAT GCTGATACGA ACCGATTAAAG ACAGTCAGTT TAATCGGATT
TTCGTGTCCC CATCGTCTAG AGGCCTAGGA CACTGCCCTT TCACGGCTGT AACAGGGGTT CGAATCCCCCT
TGGGGACGCC ATTCGATAAT GAGTGAAGA CATTATCACC GGTC'TTGA ACCGAAAACA TCTTAAAGAT
GACTCTTGCG AGTCGTGTTT AAGATATTGC TCTTTAACAA TCTGGAACAA GCTGAAAATT GAAACATGAC
AGCTGAAACT TATCCCTCCG TAGAAGTATT GGGTAAGGA TTAACCTGTC ATAGAGTCTC TCAAAATGTAG
CAGCACGAAA GTGGAACAC CTTCGGGTTG TGA
```

(SEQ ID NO 196)

100/103

Figure 100

TAAGGATAAG GAAGAAGCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA
TTCTATTCA TTTGTGTTGT TAAGAGTAGC GCGGTGAGGA CGAGACATAT AGTTGTGAT CAAGTATGTT
ATTGTAAAGA AATAATCATG GTAACAAGTA TATTCACGC ATAATAATAG ACGTTTAAGA GTATTTGTCT
TTAGGTGAA GTGCTGCAT GGATCTATAG AAATTACA

(SEQ ID NO 197)

101/103

Figure 101

```
TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTTG AGAGGTTTCAT CTCTCAAAAC
GTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTAAGAA GACGAAGAGA AACCGTAGGT TTTTCTTCAA
CCAAAACCGA GAATCAAACC GAGAAAGAAT CTTTCCGTTT TCATAAGCGA TCGCACGTTT ATGAAAACAC
AACAAACACCT TCGTAAGAAG GATGA
```

(SEQ ID NO 213)

102/103

Figure 102

```
TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTCAAT GACGCTCATA
CTGAGTACCA GGTGACACCGT TTTTGAGGTG TCTCTTCGTA TGAGGGGCCCT ATAGCTCAGC TGGTTAGAGC
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGAATA AACCTTCTT
TTTTATATGT TAATAAGGGG CCTTAGCTCA GCTGGGAGAG CGCTGCTTT GCACGCAGGA GGTGCGCGGT
TCGATCCCGC TAGGCTCCAC CAAAGATAGT TTGTTCTTTG AAACTAGAT AAGAAAAGTT AGTGTA AAAA
GACGAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAATCAAACC GAGAAAGAAT CTTTCCGTTT
TCATAAGCGA TCGCACGTTT ATGAAACAC AACACACCT TCGTAAGAAG GATGA
```

(SEQ ID NO 214)

103/103

Figure 103

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTCAAT GACGCTCATA
CTGAGTACCA GGTGACACGT TTTTGAGGTG TCTCTTCGTA TGAGGGGCCT ATAGCTCAGC TGGTTAGAGC
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGTGAATA AACCTTTCTT
TTTTATATGT TAATAAGGGG CCTTAGCTCA GCTGGGAGAG CGCCTGCTTT GCACGCAGGA GGTCAGCGGT
TCGATCCCCG TAGGCTCCAC CAAAGATAGT TTGTTCTTTG AAACTAGAT AAGAAAAAGTT AGTGTA AAAA
GACGAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAAAGAATCT TTCCGTTTTC ATAAGCGATC
GCACGTTTAT GAAACACAA CAACACCTTC GTAAGAAGGA TGA

(SEQ ID NO 215)